

IN THE CLAIMS

Claims 1-35. (Cancelled)

Claims 36-39. (Cancelled)

Claim 40. (Cancelled)

Claims 41-66. (Cancelled)

Claim 67. (New) An isolated antibody which binds specifically to a protein which catalyzes release of ADP-ribose from an ADP ribose polymer, encoded by a nucleotide sequence that is at least 80% identical to the nucleotide sequence set forth in SEQ ID NO: 1, wherein the protein has a molecular weight greater than 100 kilodaltons as determined by SDS PAGE.

Claim 68. (New) The isolated antibody of claim 67, wherein said isolated protein has the amino acid sequence set forth in SEQ ID NO: 2, 4, or 6.

Claim 69. (New) The isolated antibody of claim 67, encoded by a nucleotide sequence set forth in SEQ ID NO: 1, 2, or 3.

Claim 70. (New) An isolated antibody which binds specifically to a protein which catalyzes release of ADP-ribose from an ADP-ribose polymer, wherein said protein comprises the amino acid sequence set forth in SEQ ID NP: 11, 12, 13 or 14, and has a molecular weight greater than 100 kilodaltons, as determined by SDS-PAGE.

Claim 71. (New) The isolated antibody of claim 70, which binds specifically to a protein encoded by a nucleic acid molecule, the complementary sequence of which hybridizes under stringent conditions to the nucleotide sequences set forth in SEQ ID NO: 1.

- Claim 72. (New) The isolated antibody of claim 70, which binds specifically to a protein comprising amino acids 677-977 of SEQ ID NO: 4.
- Claim 73. (New) The isolated antibody of claim 67, selected from the group consisting of an antibody and an antibody fragment.
- Claim 74. (New) The isolated antibody of claim 73, wherein said antibody fragment is an Fc fragment, an Fab fragment, an Fab' fragment, and an Fab' (2) fragment.
- Claim 75. (New) The isolated antibody of claim 66, wherein said antibody binds to the C terminus of said protein.
- Claim 76. (New) The isolated antibody of claim 66, wherein said antibody binds to the N terminus of said protein.
- Claim 77. (New) The isolated antibody of claim 70, selected from the group consisting of an antibody and an antibody fragment.
- Claim 78. (New) The isolated antibody of claim 67, wherein said antibody fragment is an Fc fragment, an Fab fragment, an Fab' fragment, and an Fab' (2) fragment.
- Claim 79. (New) The isolated antibody of claim 70, wherein said antibody binds to the C terminus of said protein.
- Claim 80. (New) The isolated antibody of claim 70, wherein said antibody binds to the N terminus of said protein.